AMENDMENTS TO THE CLAIMS

The following listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A method of forming electrical connection members on an electrical structure comprising the steps of:

providing an electrical structure with a set of contacts;

forming at least one interface layer adhering to said set of contacts;

patterning said interface layer to form a set of pads disposed over said set of contacts;

depositing and lithographically patterning a layer of photoresist with a set of apertures over said set of pads;

forming a set of conductive pins adhering directly to said pad;

forming a barrier layer adhering to all exposed surfaces of said set of pins;

forming a layer of solder surrounding the barrier layer; and

reflowing the layer of solder.

2. (Withdrawn) A method according to claim 1, in which the material of the barrier layer blocks passage of material from the pins, thereby preventing the material from the pins from reacting with a constituent of the solder.

3. (Withdrawn) A method according to claim 1, in which the interface layer comprises a layer of adhesion material and a seed layer.

4. (Withdrawn) A method according to claim 2, in which the interface layer comprises a layer of adhesion material and a seed layer.

5. (Withdrawn) A method according to claim 1, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.

6. (Withdrawn) A method according to claim 2, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.

7. (Withdrawn) A method according to claim 3, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.

8. (Withdrawn) A method according to claim 4, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.

9. (Withdrawn) A method according to claim 1, in which the pins are formed by electroplating material into the apertures in the photoresist.

10. (Withdrawn) A method according to claim 1, in which the pins are plated with a wetting layer before the step of forming a layer of solder.

11. (Withdrawn) A method according to claim 10, in which the material of the barrier layer blocks passage of material from the pins, thereby preventing the material from the pins from reacting with a constituent of the solder.

12. (Withdrawn) A method according to claim 10, in which the interface layer comprises a layer of adhesion material and a seed layer.

13. (Withdrawn) A method according to claim 11, in which the interface layer comprises a layer of adhesion material and a seed layer.

14. (Currently Amended) An electrical structure containing electrical connection members adapted for connecting to another electrical structure comprising:

a first set of contacts in an electrical structure;

at least one interface layer adhering to said set of contacts;

a set of pads disposed over said set of contacts and including said interface layer;

a set of conductive pins ~~adhering directly~~ adhered in situ to said pads;

a barrier layer adhering to all exposed surfaces of said set of pins; and

a layer of solder surrounding the barrier layer.

15. (Original) A structure according to claim 14, in which the material of the barrier layer blocks passage of material from the pins, thereby preventing the material from the pins from reacting with a constituent of the solder.

16. (Original) A structure according to claim 14, in which the interface layer comprises a layer of adhesion material and a seed layer.

17. (Original) A structure according to claim 15, in which the interface layer comprises a layer of adhesion material and a seed layer.

18. (Original) A structure according to claim 14, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.

19. (Original) A structure according to claim 15, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.

20. (Original) A structure according to claim 14, in which a wetting layer selected from the group comprising Cu and Au is formed on the barrier layer.

21. (New) An electrical structure comprising:

a plurality of contacts positioned on a top surface of said electrical structure;

first and second interface layers positioned on said plurality of contacts;

a plurality of pads in electrical communication with said plurality of contacts; and

a plurality of electrical connection members plated directly onto said contacts, wherein said plurality of electrical connection members are integral members of said plurality of pads.

22. (New) The electrical structure according to Claim 21, further comprising a barrier layer positioned about a first surface of said plurality of electrical connection members.

23. (New) The electrical structure according to Claim 22, further comprising a layer of solder material positioned about said barrier layer.

24. (New) The electrical structure according to Claim 22, wherein the barrier layer is adapted for containing said plurality of electrical connection members.

25. (New) The electrical structure according to Claim 21, wherein said first and second interface layers comprise adhesive material and a seed layer.

26. (New) The electrical structure according to Claim 21, wherein said first and second interface layers include a material selected from the group consisting of TiW, Ti, Ta, Cr, TaN, and a combination thereof.

27. (New) The electrical structure according to Claim 21, further comprising a wetting layer formed about said barrier layer.

28. (New) The electrical structure according to Claim 27, wherein said wetting layer is selected from a group consisting of Cu, Au and a combination thereof.

AMENDMENTS TO THE DRAWINGS

The attached three sheets of drawings include formal drawings. These sheets, which include FIGS. 1-10, replace the original sheets including informal FIGS. 1-10.

Attachments: Three (3) Replacement Sheets